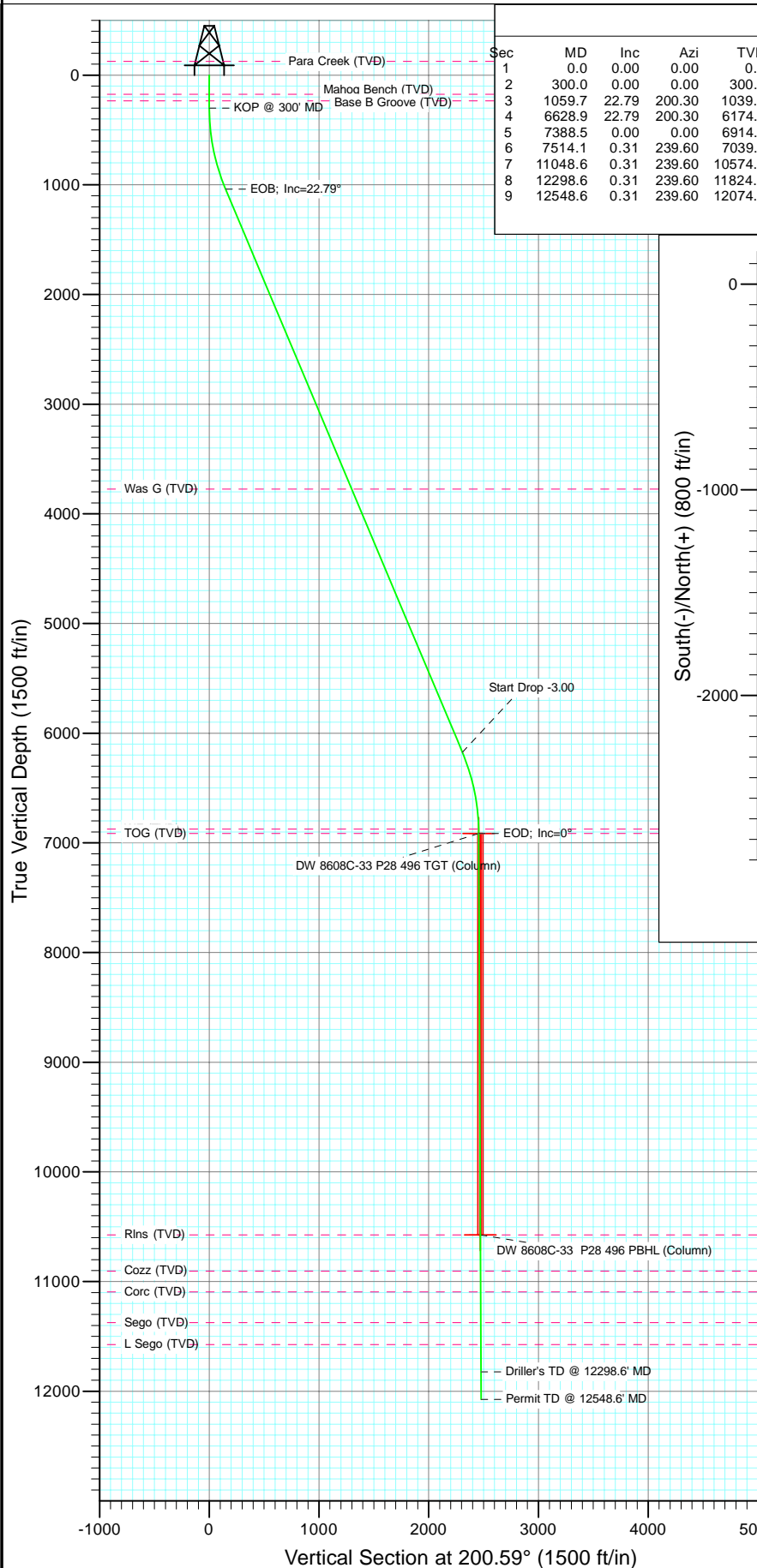
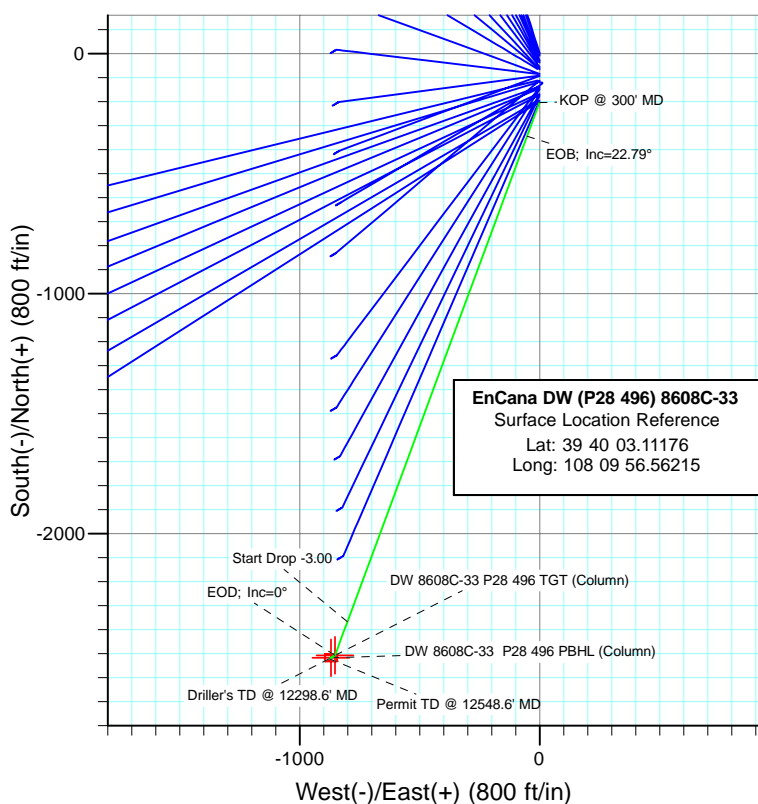




Project: Double Willow  
Site: S28-T4S-R96W (P28 496)(column pattern)  
Well: DW 8608C-33 (P28 496)  
Wellbore: DD  
Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	-203.9	-1.1	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	-203.9	-1.1	0.00	0.00	0.0	
3	1059.7	22.79	200.30	1039.8	-343.8	-52.8	3.00	200.30	149.1	
4	6628.9	22.79	200.30	6174.2	-2367.1	-801.3	0.00	0.00	2306.4	
5	7388.5	0.00	0.00	6914.0	-2506.9	-853.0	3.00	180.00	2455.5	DW 8608C-33 P28 496 TGT (Column)
6	7514.1	0.31	239.60	7039.6	-2507.1	-853.3	0.25	239.60	2455.7	
7	11048.6	0.31	239.60	10574.0	-2516.9	-870.0	0.00	0.00	2470.8	DW 8608C-33 P28 496 PBHL (Column)
8	12298.6	0.31	239.60	11824.0	-2520.4	-875.9	0.00	0.00	2476.1	
9	12548.6	0.31	239.60	12074.0	-2521.1	-877.1	0.00	0.00	2477.2	



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
174.0	174.0	Mahog Bench (TVD)
234.0	234.0	Base B Groove (TVD)
3774.0	4025.4	Was G (TVD)
6874.0	7348.5	WF (TVD)
6914.0	7388.5	TOG (TVD)
10574.0	11048.6	Rins (TVD)
10904.0	11378.6	Cozz (TVD)
11094.0	11568.6	Corc (TVD)
11374.0	11848.6	Sego (TVD)
11574.0	12048.6	L Sego (TVD)



Azimuths to True North  
Magnetic North: 10.52°  
Magnetic Field  
Strength: 52360.7nT  
Dip Angle: 65.86°  
Date: 12/1/2010  
Model: IGRF2010

Plan #1						
DW 8608C-33 (P28 496)						
WELL @ 7804.0ft (Original Well Elev)						
North American Datum 1983						
Site S28-T4S-R96W (P28 496)(column pattern), True North						
Type	Target	Azimuth	Origin	Type	N/S	E/W
Target	DW 8608C-33 P28 496 PBHL (Column)	200.59	-203.9	Slot	-1.1	0.0
Name	Target	TVD	+N/-S	+E/-W	Latitude	Longitude
DW 8608C-33 P28 496 TGT (Column)	6914.0	-2506.9	-853.039° 39'	40.35 N	108° 10' 7.46 W	
DW 8608C-33 P28 496 PBHL (Column)	10574.0	-2516.9	-870.039° 39'	40.25 N	108° 10' 7.67 W	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Site S28-T4S-R96W (P28 496)(column pattern)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Project:</b>	Double Willow	<b>MD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Site:</b>	S28-T4S-R96W (P28 496)(column pattern)	<b>North Reference:</b>	True
<b>Well:</b>	DW 8608C-33 (P28 496)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

<b>Project</b>	Double Willow		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

<b>Site</b>	S28-T4S-R96W (P28 496)(column pattern)			
<b>Site Position:</b>		<b>Northing:</b>	1,679,243.29 ft	<b>Latitude:</b> 39° 40' 5.13 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,249,687.54 ft	<b>Longitude:</b> 108° 9' 56.55 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.68 °

<b>Well</b>	DW 8608C-33 (P28 496)			
<b>Well Position</b>	<b>+N/-S</b>	-203.9 ft	<b>Northing:</b>	1,679,039.46 ft
	<b>+E/-W</b>	-1.1 ft	<b>Easting:</b>	2,249,680.44 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft
			<b>Ground Level:</b>	7,771.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/1/2010	10.52	65.86	52,361

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	-203.9	-1.1	200.59

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	-203.9	-1.1	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	-203.9	-1.1	0.00	0.00	0.00	0.00	
1,059.7	22.79	200.30	1,039.8	-343.8	-52.8	3.00	3.00	0.00	200.30	
6,628.9	22.79	200.30	6,174.2	-2,367.1	-801.3	0.00	0.00	0.00	0.00	
7,388.5	0.00	0.00	6,914.0	-2,506.9	-853.0	3.00	-3.00	0.00	180.00	DW 8608C-33 P28 496
7,514.1	0.31	239.60	7,039.6	-2,507.1	-853.3	0.25	0.25	-95.86	239.60	
11,048.6	0.31	239.60	10,574.0	-2,516.9	-870.0	0.00	0.00	0.00	0.00	DW 8608C-33 P28 496
12,298.6	0.31	239.60	11,824.0	-2,520.4	-875.9	0.00	0.00	0.00	0.00	
12,548.6	0.31	239.60	12,074.0	-2,521.1	-877.1	0.00	0.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Site S28-T4S-R96W (P28 496)(column pattern)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Project:</b>	Double Willow	<b>MD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Site:</b>	S28-T4S-R96W (P28 496)(column pattern)	<b>North Reference:</b>	True
<b>Well:</b>	DW 8608C-33 (P28 496)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	-203.9	-1.1	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	-203.9	-1.1	0.0	0.00	0.00	
174.0	0.00	0.00	174.0	-203.9	-1.1	0.0	0.00	0.00	Mahog Bench (TVD)
200.0	0.00	0.00	200.0	-203.9	-1.1	0.0	0.00	0.00	
234.0	0.00	0.00	234.0	-203.9	-1.1	0.0	0.00	0.00	Base B Groove (TVD)
300.0	0.00	0.00	300.0	-203.9	-1.1	0.0	0.00	0.00	KOP @ 300' MD
400.0	3.00	200.30	400.0	-206.4	-2.0	2.6	3.00	3.00	
500.0	6.00	200.30	499.6	-213.8	-4.7	10.5	3.00	3.00	
600.0	9.00	200.30	598.8	-226.0	-9.3	23.5	3.00	3.00	
700.0	12.00	200.30	697.1	-243.1	-15.6	41.7	3.00	3.00	
800.0	15.00	200.30	794.3	-265.0	-23.7	65.1	3.00	3.00	
900.0	18.00	200.30	890.2	-291.6	-33.5	93.5	3.00	3.00	
1,000.0	21.00	200.30	984.4	-322.9	-45.1	126.9	3.00	3.00	
1,059.7	22.79	200.30	1,039.8	-343.8	-52.8	149.1	3.00	3.00	EOB; Inc=22.79°
1,100.0	22.79	200.30	1,077.0	-358.4	-58.3	164.7	0.00	0.00	
1,200.0	22.79	200.30	1,169.2	-394.8	-71.7	203.5	0.00	0.00	
1,300.0	22.79	200.30	1,261.4	-431.1	-85.1	242.2	0.00	0.00	
1,400.0	22.79	200.30	1,353.6	-467.4	-98.6	280.9	0.00	0.00	
1,500.0	22.79	200.30	1,445.7	-503.8	-112.0	319.7	0.00	0.00	
1,600.0	22.79	200.30	1,537.9	-540.1	-125.5	358.4	0.00	0.00	
1,700.0	22.79	200.30	1,630.1	-576.4	-138.9	397.1	0.00	0.00	
1,800.0	22.79	200.30	1,722.3	-612.8	-152.3	435.9	0.00	0.00	
1,900.0	22.79	200.30	1,814.5	-649.1	-165.8	474.6	0.00	0.00	
2,000.0	22.79	200.30	1,906.7	-685.4	-179.2	513.3	0.00	0.00	
2,100.0	22.79	200.30	1,998.9	-721.7	-192.7	552.1	0.00	0.00	
2,200.0	22.79	200.30	2,091.1	-758.1	-206.1	590.8	0.00	0.00	
2,300.0	22.79	200.30	2,183.3	-794.4	-219.5	629.6	0.00	0.00	
2,400.0	22.79	200.30	2,275.5	-830.7	-233.0	668.3	0.00	0.00	
2,500.0	22.79	200.30	2,367.7	-867.1	-246.4	707.0	0.00	0.00	
2,600.0	22.79	200.30	2,459.9	-903.4	-259.8	745.8	0.00	0.00	
2,700.0	22.79	200.30	2,552.1	-939.7	-273.3	784.5	0.00	0.00	
2,800.0	22.79	200.30	2,644.3	-976.1	-286.7	823.2	0.00	0.00	
2,900.0	22.79	200.30	2,736.4	-1,012.4	-300.2	862.0	0.00	0.00	
3,000.0	22.79	200.30	2,828.6	-1,048.7	-313.6	900.7	0.00	0.00	
3,100.0	22.79	200.30	2,920.8	-1,085.0	-327.0	939.4	0.00	0.00	
3,200.0	22.79	200.30	3,013.0	-1,121.4	-340.5	978.2	0.00	0.00	
3,300.0	22.79	200.30	3,105.2	-1,157.7	-353.9	1,016.9	0.00	0.00	
3,400.0	22.79	200.30	3,197.4	-1,194.0	-367.4	1,055.6	0.00	0.00	
3,500.0	22.79	200.30	3,289.6	-1,230.4	-380.8	1,094.4	0.00	0.00	
3,600.0	22.79	200.30	3,381.8	-1,266.7	-394.2	1,133.1	0.00	0.00	
3,700.0	22.79	200.30	3,474.0	-1,303.0	-407.7	1,171.9	0.00	0.00	
3,800.0	22.79	200.30	3,566.2	-1,339.4	-421.1	1,210.6	0.00	0.00	
3,900.0	22.79	200.30	3,658.4	-1,375.7	-434.6	1,249.3	0.00	0.00	
4,000.0	22.79	200.30	3,750.6	-1,412.0	-448.0	1,288.1	0.00	0.00	
4,025.4	22.79	200.30	3,774.0	-1,421.3	-451.4	1,297.9	0.00	0.00	Was G (TVD)
4,100.0	22.79	200.30	3,842.8	-1,448.4	-461.4	1,326.8	0.00	0.00	
4,200.0	22.79	200.30	3,935.0	-1,484.7	-474.9	1,365.5	0.00	0.00	
4,300.0	22.79	200.30	4,027.1	-1,521.0	-488.3	1,404.3	0.00	0.00	
4,400.0	22.79	200.30	4,119.3	-1,557.3	-501.7	1,443.0	0.00	0.00	
4,500.0	22.79	200.30	4,211.5	-1,593.7	-515.2	1,481.7	0.00	0.00	
4,600.0	22.79	200.30	4,303.7	-1,630.0	-528.6	1,520.5	0.00	0.00	
4,700.0	22.79	200.30	4,395.9	-1,666.3	-542.1	1,559.2	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Site S28-T4S-R96W (P28 496)(column pattern)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Project:</b>	Double Willow	<b>MD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Site:</b>	S28-T4S-R96W (P28 496)(column pattern)	<b>North Reference:</b>	True
<b>Well:</b>	DW 8608C-33 (P28 496)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	22.79	200.30	4,488.1	-1,702.7	-555.5	1,597.9	0.00	0.00	
4,900.0	22.79	200.30	4,580.3	-1,739.0	-568.9	1,636.7	0.00	0.00	
5,000.0	22.79	200.30	4,672.5	-1,775.3	-582.4	1,675.4	0.00	0.00	
5,100.0	22.79	200.30	4,764.7	-1,811.7	-595.8	1,714.2	0.00	0.00	
5,200.0	22.79	200.30	4,856.9	-1,848.0	-609.3	1,752.9	0.00	0.00	
5,300.0	22.79	200.30	4,949.1	-1,884.3	-622.7	1,791.6	0.00	0.00	
5,400.0	22.79	200.30	5,041.3	-1,920.6	-636.1	1,830.4	0.00	0.00	
5,500.0	22.79	200.30	5,133.5	-1,957.0	-649.6	1,869.1	0.00	0.00	
5,600.0	22.79	200.30	5,225.7	-1,993.3	-663.0	1,907.8	0.00	0.00	
5,700.0	22.79	200.30	5,317.8	-2,029.6	-676.5	1,946.6	0.00	0.00	
5,800.0	22.79	200.30	5,410.0	-2,066.0	-689.9	1,985.3	0.00	0.00	
5,900.0	22.79	200.30	5,502.2	-2,102.3	-703.3	2,024.0	0.00	0.00	
6,000.0	22.79	200.30	5,594.4	-2,138.6	-716.8	2,062.8	0.00	0.00	
6,100.0	22.79	200.30	5,686.6	-2,175.0	-730.2	2,101.5	0.00	0.00	
6,200.0	22.79	200.30	5,778.8	-2,211.3	-743.6	2,140.2	0.00	0.00	
6,300.0	22.79	200.30	5,871.0	-2,247.6	-757.1	2,179.0	0.00	0.00	
6,400.0	22.79	200.30	5,963.2	-2,283.9	-770.5	2,217.7	0.00	0.00	
6,500.0	22.79	200.30	6,055.4	-2,320.3	-784.0	2,256.5	0.00	0.00	
6,600.0	22.79	200.30	6,147.6	-2,356.6	-797.4	2,295.2	0.00	0.00	
6,628.9	22.79	200.30	6,174.2	-2,367.1	-801.3	2,306.4	0.00	0.00	Start Drop -3.00
6,700.0	20.66	200.30	6,240.3	-2,391.8	-810.4	2,332.7	3.00	-3.00	
6,800.0	17.66	200.30	6,334.7	-2,422.6	-821.8	2,365.5	3.00	-3.00	
6,900.0	14.66	200.30	6,430.8	-2,448.7	-831.5	2,393.3	3.00	-3.00	
7,000.0	11.66	200.30	6,528.1	-2,470.0	-839.4	2,416.1	3.00	-3.00	
7,100.0	8.66	200.30	6,626.5	-2,486.5	-845.5	2,433.7	3.00	-3.00	
7,200.0	5.66	200.30	6,725.8	-2,498.2	-849.8	2,446.2	3.00	-3.00	
7,300.0	2.66	200.30	6,825.5	-2,505.0	-852.3	2,453.4	3.00	-3.00	
7,348.5	1.20	200.30	6,874.0	-2,506.5	-852.9	2,455.1	3.00	-3.00	WF (TVD)
7,388.5	0.00	0.00	6,914.0	-2,506.9	-853.0	2,455.5	3.00	-3.00	EOD; Inc=0° - TOG (TVD) - DW 8608C-33 P28
7,400.0	0.03	239.60	6,925.5	-2,506.9	-853.0	2,455.5	0.25	0.25	
7,500.0	0.28	239.60	7,025.5	-2,507.1	-853.2	2,455.7	0.25	0.25	
7,514.1	0.31	239.60	7,039.6	-2,507.1	-853.3	2,455.7	0.25	0.25	
7,600.0	0.31	239.60	7,125.4	-2,507.4	-853.7	2,456.1	0.00	0.00	
7,700.0	0.31	239.60	7,225.4	-2,507.6	-854.2	2,456.5	0.00	0.00	
7,800.0	0.31	239.60	7,325.4	-2,507.9	-854.7	2,457.0	0.00	0.00	
7,900.0	0.31	239.60	7,425.4	-2,508.2	-855.1	2,457.4	0.00	0.00	
8,000.0	0.31	239.60	7,525.4	-2,508.5	-855.6	2,457.8	0.00	0.00	
8,100.0	0.31	239.60	7,625.4	-2,508.7	-856.1	2,458.2	0.00	0.00	
8,200.0	0.31	239.60	7,725.4	-2,509.0	-856.6	2,458.7	0.00	0.00	
8,300.0	0.31	239.60	7,825.4	-2,509.3	-857.0	2,459.1	0.00	0.00	
8,400.0	0.31	239.60	7,925.4	-2,509.6	-857.5	2,459.5	0.00	0.00	
8,500.0	0.31	239.60	8,025.4	-2,509.8	-858.0	2,459.9	0.00	0.00	
8,600.0	0.31	239.60	8,125.4	-2,510.1	-858.4	2,460.4	0.00	0.00	
8,700.0	0.31	239.60	8,225.4	-2,510.4	-858.9	2,460.8	0.00	0.00	
8,800.0	0.31	239.60	8,325.4	-2,510.7	-859.4	2,461.2	0.00	0.00	
8,900.0	0.31	239.60	8,425.4	-2,511.0	-859.9	2,461.6	0.00	0.00	
9,000.0	0.31	239.60	8,525.4	-2,511.2	-860.3	2,462.1	0.00	0.00	
9,100.0	0.31	239.60	8,625.4	-2,511.5	-860.8	2,462.5	0.00	0.00	
9,200.0	0.31	239.60	8,725.4	-2,511.8	-861.3	2,462.9	0.00	0.00	
9,300.0	0.31	239.60	8,825.4	-2,512.1	-861.8	2,463.3	0.00	0.00	
9,400.0	0.31	239.60	8,925.4	-2,512.3	-862.2	2,463.8	0.00	0.00	
9,500.0	0.31	239.60	9,025.4	-2,512.6	-862.7	2,464.2	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Site S28-T4S-R96W (P28 496)(column pattern)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Project:</b>	Double Willow	<b>MD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Site:</b>	S28-T4S-R96W (P28 496)(column pattern)	<b>North Reference:</b>	True
<b>Well:</b>	DW 8608C-33 (P28 496)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,600.0	0.31	239.60	9,125.4	-2,512.9	-863.2	2,464.6	0.00	0.00	
9,700.0	0.31	239.60	9,225.4	-2,513.2	-863.6	2,465.0	0.00	0.00	
9,800.0	0.31	239.60	9,325.4	-2,513.5	-864.1	2,465.5	0.00	0.00	
9,900.0	0.31	239.60	9,425.4	-2,513.7	-864.6	2,465.9	0.00	0.00	
10,000.0	0.31	239.60	9,525.4	-2,514.0	-865.1	2,466.3	0.00	0.00	
10,100.0	0.31	239.60	9,625.4	-2,514.3	-865.5	2,466.8	0.00	0.00	
10,200.0	0.31	239.60	9,725.4	-2,514.6	-866.0	2,467.2	0.00	0.00	
10,300.0	0.31	239.60	9,825.4	-2,514.8	-866.5	2,467.6	0.00	0.00	
10,400.0	0.31	239.60	9,925.4	-2,515.1	-867.0	2,468.0	0.00	0.00	
10,500.0	0.31	239.60	10,025.4	-2,515.4	-867.4	2,468.5	0.00	0.00	
10,600.0	0.31	239.60	10,125.4	-2,515.7	-867.9	2,468.9	0.00	0.00	
10,700.0	0.31	239.60	10,225.4	-2,516.0	-868.4	2,469.3	0.00	0.00	
10,800.0	0.31	239.60	10,325.4	-2,516.2	-868.8	2,469.7	0.00	0.00	
10,900.0	0.31	239.60	10,425.4	-2,516.5	-869.3	2,470.2	0.00	0.00	
11,000.0	0.31	239.60	10,525.4	-2,516.8	-869.8	2,470.6	0.00	0.00	
11,048.6	0.31	239.60	10,574.0	-2,516.9	-870.0	2,470.8	0.00	0.00	Rins (TVD) - DW 8608C-33 P28 496 PBHL (Cc
11,100.0	0.31	239.60	10,625.4	-2,517.1	-870.3	2,471.0	0.00	0.00	
11,200.0	0.31	239.60	10,725.4	-2,517.3	-870.7	2,471.4	0.00	0.00	
11,300.0	0.31	239.60	10,825.4	-2,517.6	-871.2	2,471.9	0.00	0.00	
11,378.6	0.31	239.60	10,904.0	-2,517.8	-871.6	2,472.2	0.00	0.00	Cozz (TVD)
11,400.0	0.31	239.60	10,925.4	-2,517.9	-871.7	2,472.3	0.00	0.00	
11,500.0	0.31	239.60	11,025.4	-2,518.2	-872.2	2,472.7	0.00	0.00	
11,568.6	0.31	239.60	11,094.0	-2,518.4	-872.5	2,473.0	0.00	0.00	Corc (TVD)
11,600.0	0.31	239.60	11,125.4	-2,518.4	-872.6	2,473.1	0.00	0.00	
11,700.0	0.31	239.60	11,225.4	-2,518.7	-873.1	2,473.6	0.00	0.00	
11,800.0	0.31	239.60	11,325.4	-2,519.0	-873.6	2,474.0	0.00	0.00	
11,848.6	0.31	239.60	11,374.0	-2,519.1	-873.8	2,474.2	0.00	0.00	Sego (TVD)
11,900.0	0.31	239.60	11,425.4	-2,519.3	-874.0	2,474.4	0.00	0.00	
12,000.0	0.31	239.60	11,525.4	-2,519.6	-874.5	2,474.8	0.00	0.00	
12,048.6	0.31	239.60	11,574.0	-2,519.7	-874.7	2,475.1	0.00	0.00	L Sego (TVD)
12,100.0	0.31	239.60	11,625.4	-2,519.8	-875.0	2,475.3	0.00	0.00	
12,200.0	0.31	239.60	11,725.4	-2,520.1	-875.5	2,475.7	0.00	0.00	
12,298.6	0.31	239.60	11,824.0	-2,520.4	-875.9	2,476.1	0.00	0.00	Driller's TD @ 12298.6' MD
12,300.0	0.31	239.60	11,825.4	-2,520.4	-875.9	2,476.1	0.00	0.00	
12,400.0	0.31	239.60	11,925.4	-2,520.7	-876.4	2,476.5	0.00	0.00	
12,500.0	0.31	239.60	12,025.4	-2,520.9	-876.9	2,477.0	0.00	0.00	
12,548.6	0.31	239.60	12,074.0	-2,521.1	-877.1	2,477.2	0.00	0.00	Permit TD @ 12548.6' MD

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
DW 8608C-33 P28 496 - hit/miss target - Shape	0.00	0.00	6,914.0	-2,506.9	-853.0	1,676,762.46	2,248,761.34	39° 39' 40.35 N	108° 10' 7.46 W
DW 8608C-33 P28 496 - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,574.0	-2,516.9	-870.0	1,676,752.98	2,248,744.05	39° 39' 40.25 N	108° 10' 7.67 W

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Site S28-T4S-R96W (P28 496)(column pattern)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Project:</b>	Double Willow	<b>MD Reference:</b>	WELL @ 7804.0ft (Original Well Elev)
<b>Site:</b>	S28-T4S-R96W (P28 496)(column pattern)	<b>North Reference:</b>	True
<b>Well:</b>	DW 8608C-33 (P28 496)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
174.0	174.0	Mahog Bench (TVD)				
234.0	234.0	Base B Groove (TVD)				
4,025.4	3,774.0	Was G (TVD)				
7,348.5	6,874.0	WF (TVD)				
7,388.5	6,914.0	TOG (TVD)				
11,048.6	10,574.0	Rlns (TVD)				
11,378.6	10,904.0	Cozz (TVD)				
11,568.6	11,094.0	Corc (TVD)				
11,848.6	11,374.0	Sego (TVD)				
12,048.6	11,574.0	L Sego (TVD)				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
300.0	300.0	-203.9	-1.1	KOP @ 300' MD	
1,059.7	1,039.8	-343.8	-52.8	EOB; Inc=22.79°	
6,628.9	6,174.2	-2,367.1	-801.3	Start Drop -3.00	
7,388.6	6,914.0	-2,506.9	-853.0	EOD; Inc=0°	
12,298.6	11,824.0	-2,520.4	-875.9	Driller's TD @ 12298.6' MD	
12,548.6	12,074.0	-2,521.1	-877.1	Permit TD @ 12548.6' MD	